

# FACILITY MASTER PLAN STUDY APRIL 2017





## OTIUM PLANNING GROUP PTY LTD



### Head Office:

Level 6 60 Albert Road South Melbourne VIC 3205 Phone: (03) 9698 7300 Email: vic@otiumplanning.com.au Web: www.otiumplanning.com.au ABN: 30 605 962 169 ACN: 605 962 169

## **Brisbane Office**

Suite 8, 29 Mount Cotton Road Capalaba Qld 4157 Ph: 07 3823 5688 Email: david@otiumplanning.com.au

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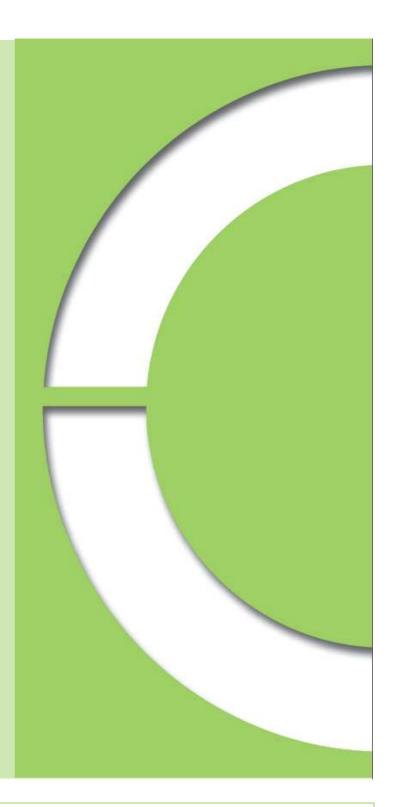
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## TABLE OF CONTENTS

1.	EXE	CUTIVE SUMMARY	1
1. 1. 1. 1. 1. 1.	2 3 4 5 6	PROJECT OVERVIEW STUDY APPROACH SNAPSHOT OF BBI MEMBERSHIP AND CATCHMENT POPULATION STADIUM USAGE AND FUTURE PROVISION BASKETBALL QLD STATE FACILITY STRATEGY KEY FINDINGS DEMAND FOR BASKETBALL COMPETITION AND SHORTFALL OF COURTS CONCLUSION AND RECOMMENDATION	1 1 2 2
2.	INTE	RODUCTION	3
2. 2. 2.	2	STUDY BACKGROUND PROJECT OBJECTIVES PROJECT METHODOLOGY	3
3.	POP	PULATION ANALYSIS AND IMPLICATIONS	5
3. 3.	-	CITY OF BRISBANE PROFILE	
4.	BBI	PLAYER PROFILE	3
4. 4. 4.	2	BRISBANE BASKETBALL PARTICIPATION / MEMBERSHIP	14
5.	PRO	JECTED MEMBERSHIP1	7
5.	1	POPULATION AND EXISTING/ PLANNED INDOOR MULTI-COURT PROVISION	17
6.	POS	SIBLE IMPLICATIONS FOR INDOOR MULTI-COURT FACILITIES2	22
7.	RES	EARCH AND TRENDS2	23
7. 7.	-	LITERATURE REVIEW	
8.	BRIS	SBANE INDOOR MULTI-COURT REVIEW2	27
8. 8. 8. 8.	2 3	CURRENT FACILITY PROVISION	27 29
9.	BBI	IMMEDIATE AND FUTURE SHORTFALL OF INDOOR COURTS FOR BASKETBALL COMPETITION3	81
9. 9. 9. 9.	2 3 4	PROJECTED DEMAND FOR INDOOR MULTI-COURT FACILITIES	31 32 33

APPENDIX 1:	INDICATIVE FACILITY LAYOUT	35
APPENDIX 2:	USAGE SUMMARY OF VINCE HICKEY STADIUM	

## 1. Executive Summary

### 1.1 Project Overview

Brisbane Basketball Inc (BBI) engaged Otium Planning Group to undertake a Master Plan study to:

Determine the facilities that will be required to support the basketball activities of BBI in the short and long term

The study is being conducted in two parts. The first stage comprises a needs assessment and determination of the scale of facility required. This report summarises the findings of this analysis.

Stage two of the Master Plan will investigate:

- The most feasible location for the provision of additional indoor courts
- Analysis of the needs of other indoor sport user groups in the BBI catchment area that could be met
- Establishment of a business plan for the provision of additional courts and identified allied activities
- Development of a schematic design and cost plan for the additional court provision

#### 1.2 Study Approach

A review of background reports and plans was conducted including the recently completed State Facility Plan for Basketball Queensland and facility strategies for Basketball NSW and Basketball Victoria. An analysis of current basketball membership for BBI, together with an analysis of current (2016) and projected (2026) population of the Brisbane Local Government Area (LGA), was undertaken.

Building on research, previous basketball strategies and consultation findings, participation models were developed to assist in identifying current and future court requirements and priorities.

#### 1.3 Snapshot of BBI Membership and Catchment Population

- BBI membership accounts for 40% of registered players in Brisbane<sup>1</sup>
- BBI membership has increased every year for the past three years
- Approximately one-third of BBI members live in inner city suburbs (32%) which are projected to account for the largest growth in population in Brisbane by 2026 (+54,727)
- The lower than average median age of Brisbane inner city (33 years) and Brisbane south (34 years) make these attractive target areas to increase participation in basketball

#### 1.4 Stadium Usage and Future Provision

- Industry trends indicate that peak usage for indoor sports courts is generally between 4.00pm to 10.00pm on weekdays and 9.00am to 5.00pm on weekends.
- Use of the BBI stadium at Auchenflower is far in excess of these hours (refer Section 7.2).
- The BBI stadium is at 100% capacity during weekday peak times and 88% capacity on weekends
- For this reason BBI relies on nine alternative venues to accommodate training and competition need which costs BBI \$90,560 per annum in hire fees. All venues are located within schools.
- Spreading competition across several venues does not enable economies of scale, increases the pressure on limited volunteers, and decreases the viability of social competitions.
- Single court facilities are not functional for conducting competitions in indoor court sports and stadiums with less than three to four courts are less likely to be financially viable.

<sup>&</sup>lt;sup>1</sup> Data provided by Basketball Queensland (3,664/ 9,029)

Brisbane Basketball Inc - Facility Master Plan (Stage 1 Report - Final)

- Demand for multi-court facilities in Brisbane is high and there is little, if any, spare capacity during peak hours.
- Larger centralised facilities are more efficient in terms of both competition coordination and financial sustainability.
- Brisbane City Council does not have any plans to increase the provision of indoor courts before 2026 therefore population growth will impact on basketball and other indoor sports as facilities already at capacity will be unable to meet demands.

### 1.5 Basketball Qld State Facility Strategy Key Findings

- The shortfall of indoor courts in Queensland is greatest in the Brisbane City Council LGA.
- Demand modelling identified an immediate (2016) shortfall of up to 8 courts for basketball activities. By 2026, if no additional courts are provided, population growth will increase this shortfall to up to 11 courts.
- Over one third (34%) of Basketball Queensland's total registered players reside in Brisbane and the city does not have a state level facility (6 courts).
- Basketball participation rates in Queensland are lower than NSW and Victoria. Key findings from studies in NSW and Victoria found that the level of indoor court facilities in a location directly impacts on basketball registrations and participation levels<sup>2</sup>.

#### 1.6 Demand for basketball competition and shortfall of courts

From analysis of current supply and modelling of current and future participation (refer sections 9.2 and 9.3) it is evident that:

- There is an immediate under supply of 2 to 4-indoor courts to meet competition demands for BBI.
- <u>If no additional multi-court facilities are provided</u>, this shortfall in indoor courts is projected to increase to between 3 to 5 indoor courts by 2026. This does not account for latent, unmet demand due to under-supply and could be considered a conservative estimate.

### 1.7 Conclusion and Recommendation

There is clearly a demand for additional multi-court provision to meet current and future BBI needs and contribute to addressing the shortfall in indoor sports court provision in Brisbane.

It is recommended that BBI proceed to Stage 2 of the Master Plan to identify the most appropriate facility scale and location; develop schematic plans, broad cost estimates, and a business plan for additional courts that can serve as a state level facility for basketball, and accommodate other indoor sport needs.

<sup>&</sup>lt;sup>2</sup> NSW Basketball Facilities Strategy, 2016 and Basketball Victoria, Facilities Master Plan, November 2012.

## 2. Introduction

Brisbane Basketball Incorporated (BBI) is the body responsible for administering the competitions and development activities for basketball in the Greater Brisbane area. Primarily BBI operates its activities at the Vince Hickey Basketball Stadium in Auchenflower and has its central offices and key staff located at the venue.

Built in 1974, the Dixon Street Auchenflower facility has four indoor courts and seating capacity for approximately 1,000 people (600 permanent). It was originally built as a two-court stadium and was the premier basketball facility for basketball at the time. In 1999 a further two courts were added to the site.

The stadium is well located next to the train line and station and is just three kilometres from the CBD of Brisbane however it is adjacent to a park and the rail line therefore is limited in terms of future expansion to meet participation demands.

The expansive nature of the City of Greater Brisbane has seen BBI extend its operations into a number of school facilities to cater for demand of the population playing basketball and as such has catchment areas reaching out across the length and breadth of the city. It is the largest association in Queensland with approximately 400 teams competing in a range of competitions on a weekly basis.

BBI currently utilise nine other venues - all owned by education to cater for the demand of their current membership base. Multi-court venues are in high demand and competition from other indoor sports e.g. futsal/ indoor soccer, volleyball for the use of the facilities impacts on the level of access basketball associations have during peak times for competition.

This report will respond in a strategic way to existing facility pressures and future demands brought about by projected population growth in Brisbane City. In identifying current and future demand to play basketball, priorities regarding the provision of facilities can be determined and enable BBI to advocate for funding of new or expansion of current facilities.

#### 2.1 Study Background

This report analyses the current usage and demand of the Vince Hickey Stadium and determines future demand for court space.

The report has been broken down into two distinct stages. Stage one considers the current and future demand for facilities and identifies the level of provision that are required to accommodate the expected participation rates.

Stage two involves the assessment of potential site options based on the needs analysis and an agreed components schedule. Once a final site option is agreed, concept plans will be produced and a cost plan developed to better understand the funding requirements. Stage two will not commence until BBI provide the direction to do so and is not included as part of this report.

## 2.2 Project Objectives

The key objectives for stage one of the report are as follows:

- Clearly articulate the current usage and demand of the Auchenflower facility and the additional external courts that are hired to accommodate the over flow of competition and training.
- To determine the facilities that will be required to support the basketball activities of BBI in the short and long term future.



## 2.3 Project Methodology

The following information provides details on the proposed project methodology tasks and associated stages of work designed to address the project objectives specified within the Project Brief.

STAGE	TASK	
Stage One: Needs	1.	Project Clarification
Assessment and Analysis	2.	Review relevant documents and reports
Anatysis	3.	Demographic review and analysis
	4.	Industry trend review
	5.	Market analysis
	6.	Occupancy review
	7.	Facility component schedule
		Hold point before stage two progresses
Stage 2: Site Review	8.	Site review
and Business feasibility study	9.	Preferred site
jeusionity study	10.	Values and vision workshop
	11.	Business case
	12.	Financial modelling and sensitivity analysis
	13.	Concept plan
	14.	Capital costs
	15.	Draft feasibility study report
	16.	Review process
	17.	Final report

#### Table 1 Project Methodolgy





## 3. Population Analysis and Implications

This section of the report provides an analysis of the demographics of the Brisbane LGA to identify characteristics that may impact on the current and future use of basketball facilities. The demographic data assists in identifying demand as the population increases and the best locations to service the demand.

Age profiles are also an indicator of an area's residential role and function and how it is likely to change in the future. The age structure of a population is usually indicative of an area's era of settlement and provides key insights into the level of demand for services and facilities (as most services and facilities are age-specific).

#### 3.1 City of Brisbane Profile

#### 3.1.1 Age Structure

A comparative analysis of the age profile of the Brisbane LGA compared to Queensland as a whole was undertaken<sup>3</sup>.

Table 2: Population Projections by Age (as a percentage of total) for Brisbane City LGA to 20	026 (medium
series)	

	2016 ESTIMATED POPULATION				2	2026 PROJECT	ED POPULATIO	N
Age	Brist	bane	Q	LD	Brist	oane	QI	LD
Groups	Number	%	Number	%	Number	%	Number	%
0-4	73,747	6.3%	323,305	6.7%	76,005	5.8%	362,043	6.3%
5-9	68,896	5.9%	324,658	6.7%	72,311	5.5%	365,860	6.4%
10-14	65,696	5.6%	312,209	6.4%	72,107	5.5%	368,806	6.4%
15-19	75,428	6.4%	312,838	6.4%	84,292	6.5%	367,337	6.4%
20-24	100,655	8.6%	328,692	6.8%	108,843	8.3%	367,961	6.4%
25-29	102,230	8.7%	337,113	6.9%	106,329	8.1%	370,098	6.5%
30-34	98,212	8.3%	343,106	7.1%	99,033	7.6%	375,039	6.5%
35-39	86,928	7.4%	321,062	6.6%	95,431	7.3%	386,250	6.7%
40-44	85,295	7.2%	333,674	<b>6.9</b> %	93,096	7.1%	387,828	6.8%
45-49	80,049	6.8%	330,723	6.8%	83,648	6.4%	355,556	6.2%
50-54	71,994	6.1%	314,052	6.5%	80,090	6.1%	353,163	6.2%
55-59	64,838	5.5%	296,964	6.1%	73,094	5.6%	339,683	<b>5.9</b> %
60-64	55,362	4.7%	262,279	5.4%	63,743	<b>4.9</b> %	316,174	5.5%
65-69	47,907	4.1%	238,621	4.9%	56,085	4.3%	292,035	5.1%
70-74	34,927	3.0%	180,421	3.7%	47,191	3.6%	247,640	4.3%
75-79	25,188	2.1%	125,647	2.6%	40,162	3.1%	210,235	3.7%
80-84	18,284	1.6%	83,347	1.7%	27,520	2.1%	141,553	2.5%
85+	21,172	1.8%	84,336	1.7%	26,207	2.0%	122,803	2.1%
TOTAL	1,176,807	100%	4,853,048	100%	1,305,187	100%	5,730,062	100%

Key differences between Brisbane City and Queensland as a whole are:

• The city has a higher proportion of its population aged 20 to 44 years (40.2%) than the rest of Queensland (34.3%). The prevalence of younger adults in the city is consistent with their tendency to migrate out of regional areas to pursue work, education and other opportunities in the capital city.

Brisbane Basketball Inc - Facility Master Plan (Stage 1 Report - Final)

<sup>&</sup>lt;sup>3</sup> Queensland Government Population Projections, 2015 edition; Australian Bureau of Statistics, Population by age and sex, regions of Australia, 2014 (Cat no. 3235.0). © State of Queensland, 2016.

- The highest number of the population fall within the 20-24year (100,655 persons) and 25-29year (102,230 persons) age cohorts.
- The city has a lower proportion of young people aged 0-14 years (17.8%) compared to Queensland as a whole (19.8%).
- Brisbane has a slightly lower proportion aged 19 years and under (24%) than the rest of the state (26.2%).
- Minor differences between the age structure of Brisbane City and Queensland were:
  - A higher percentage of persons aged 20 to 24 (8.6% compared to 6.8%)
  - A higher percentage of persons aged 25 to 29 (8.7% compared to 6.9%)
  - A higher percentage of persons aged 30 to 34 (8.3% compared to 7.1%)
  - A higher percentage of persons aged 35 to 39 (8.3% compared to 7.1%)
- The age group most prominent in basketball player registrations across Qld is 10 to 19years age cohort<sup>4</sup>. The Brisbane proportion of this age cohort (12%) is in line with Queensland as a whole (13%).
- The proportion of people aged 45years and over is lower in Brisbane (36%) than the rest of the state (39%).

The characteristics of the projected population 2026<sup>5</sup> population remains relatively consistent compared to 2016 (refer Figure 1).

#### Brisbane City Growth (Persons) 2016-2026 16,000 +14,974 14,000 +12,264 12,000 Growth (persons) +9.236 10,000 +8,179 +8.864+8,256 +8,504 +8,187 +8.382+8,095 +7.801 8,000 +6,411 6,000 +5,035 +4.098 +3.599+3.416 4,000 +2,258 2,000 +82 0 40-AA 5.0 20:24 25:29 15:19 20:8A 0.4 6.64 65-69 10-1A KY A GOT SYT ళ్లు Age Cohort

#### Figure 1: Brisbane LGA population growth (by age cohort) 2016-2026

Other key population characteristics are:

- The city will continue to have a higher proportion of its population aged 20 to 44years (38%) than the rest of Queensland (33%), decreasing slightly from 2016 (-1.8%).
- The city will continue to have a slightly lower proportion aged 19years and under (24.2%) than the rest of the state (26.2%).
- The city will continue to have the highest number of the population fall with the 20-24year (108,843 persons) and 25-29year (106,329 persons) age cohorts.
- The number of residents falling within 10 to 19years will remain unchanged in 2026 from 2016.
- There will be an increase of people aged 45 years and over from 2016. The proportion in Brisbane (35.7%) will be slightly lower that the rest of the state (39.5%).

<sup>&</sup>lt;sup>4</sup> Basketball Qld State Facility Plan

<sup>&</sup>lt;sup>5</sup> Queensland Government Population Projections, 2015 edition; Australian Bureau of Statistics, Population by age and sex, regions of Australia, 2014 (Cat no. 3235.0). © State of Queensland, 2016.



From the Queensland Government data, other demographic characteristics of Brisbane City include<sup>6</sup>;

- The median age of Brisbane LGA (34.6 years) is significantly younger than Queensland as a whole (36.9 years). The median age in Brisbane is projected to increase to 36.8 years while the rest of Queensland will increase to 38.7 years.
- The average median age for main suburban areas within Brisbane LGA are listed in Table 5 below<sup>7</sup>. Brisbane Inner City (33years) and Brisbane South (34years) have the lowest average median age.

#### Table 3: Average Median Age of Brisbane Residents

	AVERAGE MEDIAN AGE: TOTAL PERSONS	AVERAGE MEDIAN AGE: MALES	AVERAGE MEDIAN AGE: FEMALES
Brisbane East	40	39	42
Brisbane North	37	36	38
Brisbane South	34	34	35
Brisbane West	38	37	38
Brisbane Inner City	33	34	33

Other characteristics are;

- The Brisbane City LGA has a lower percentage of low income families (9.3%) than the rest of Queensland (13.0%).
- Brisbane City LGA has a higher median annual family income (\$97,396 pa) compared to Queensland as a whole (\$75,556 pa).
- Brisbane City LGA has a higher median personal income (\$36,192 pa) compared to Queensland as a whole (\$30,524 pa).
- There is a higher percentage of persons in Brisbane City in the least socio-economic disadvantage quintile (40.4%) than compared with the rest of Queensland (20.0%). The city has a much lower proportion of the population living in the most disadvantaged quintile (6.6%) than the rest of the state (20.0%).
- The unemployment rate in the Brisbane City LGA at the September quarter 2016 of 5.1% is below the Queensland rate of 6.1%.

#### 3.1.2 Summary

The current and future demographics can provide some guidance as to the key considerations for planning for sport and active recreation in the region. Market research indicates people aged less than 40 years of age utilise sporting facilities twice as much as those aged over 40 years of age. The median age of Brisbane (34.6years) is considerably lower than Queensland as whole (36.9years). By 2026 the 20-39year age cohorts will make up nearly a third (31.38%) of the population living in the City of Brisbane.

The younger median age suggests that participation in sport and active recreation will continue to be important for Brisbane. The relatively stable proportion of youth in the population by 2026 means that provision of sport and active recreation opportunities that appeal to young people is an ongoing priority and there is likely to be continued demand for indoor sport.

Brisbane LGA has a higher median average of income (both family and personal income), a higher rate of employment and a lower percentage of the population living in socio-economic disadvantage that the rest of Queensland. These factors indicate Brisbane residents may have a higher average disposable income to spend on sport, recreation, and leisure facilities.

### 3.2 Population Projections

This section highlights where the growth is projected to occur in Brisbane city population.

<sup>&</sup>lt;sup>6</sup> Queensland Regional Profiles, Brisbane C Local Government Area (LGA), Queensland Government Statistician's Office, Queensland Treasury, December 2016

<sup>&</sup>lt;sup>7</sup> Queensland Regional Profiles, Brisbane C Local Government Area (LGA), Queensland Government Statistician's Office, Queensland Treasury, December 2016



From Queensland Government data<sup>8</sup>, the estimated 2016 population of Brisbane City statistical area is 1,176,807. The population is projected to increase to 1,305,187 by 2026 (refer Table 4).

The growth in population will increase the burden on existing sport and recreation infrastructure and necessitate new facilities as competition for access from user groups and the broader community increases.

#### Table 4: Brisbane City LGA Projected Increase in Population 2016 - 2026

2016	2021	2026
1,176,807	1,246,073	1,305,187

Over the next decade to 2026, the highest projected suburban growth areas are:

- South Brisbane (+10,744)
- West End (+7,475)
- Fortitude Valley (+5,993)
- Newstead-Bowen Hills (+9,631)

Table 5 below and Figure 2 (p 18) illustrates projected growth across the City of Brisbane to 2026.

#### Table 5: Brisbane Projected Growth by Suburb (medium series)<sup>9</sup>

LOCATION	ESTIMATED 2016 POPULATION	PROJECTED 2026 POPULATION	Change 2016-2026
Brisbane - East (SA4)	232,990	258,242	25,252
Capalaba	74,323	79,927	5,604
Alexandra Hills	17,416	18,307	891
Belmont - Gumdale	7,997	8,076	79
Birkdale	15,313	16,723	1,410
Capalaba	17,702	19,566	1,864
Thorneside	3,907	4,075	168
Wellington Point	11,988	13,179	1,191
Cleveland - Stradbroke	85,657	101,131	15,474
Cleveland	15,777	18,588	2,811
Ormiston	6,139	6,941	802
Redland Bay	15,340	18,390	3,050
Redland Islands	9,646	11,149	1,503
Sheldon - Mount Cotton	7,843	8,856	1,013
Thornlands	14,627	19,005	4,378
Victoria Point	16,283	18,202	1,919
Wynnum - Manly	73,010	77,184	4,174
Brisbane Port - Lytton	8	8	0
Manly - Lota	7,813	7,863	50
Manly West	12,077	12,317	240
Murarrie	4,658	5,717	1,059
Tingalpa	8,870	9,293	423
Wakerley	9,894	11,065	1,171
Wynnum	13,835	14,516	681
Wynnum West - Hemmant	15,855	16,404	549

<sup>&</sup>lt;sup>8</sup> Queensland Government Statisticians Office, Queensland Treasury. Projected population (medium series), by statistical area level 2 (SA2), SA3 and SA4, Queensland, 2011 to 2036 (2015 Edition).

<sup>&</sup>lt;sup>9</sup> Suburbs that have been omitted under Cleveland-Stradbroke include Cleveland, Ormiston, Redland Bay, Redland Islands, Sheldon, Mt Cotton, Thornlands and Victoria Point.

LOCATION	ESTIMATED 2016 POPULATION	PROJECTED 2026	Change
		POPULATION	2016-2026
Brisbane - North (SA4)	214,048	231,415	17,367
Bald Hills - Everton Park	41,972	47,076	5,104
Bald Hills	7,569	7,871	302
Bridgeman Downs	8,225	9,283	1,058
Carseldine	9,082	11,034	1,952
Everton Park	9,414	10,584	1,170
McDowall	7,682	8,303	621
Chermside	72,581	76,295	3,714
Aspley	13,303	13,491	188
Chermside	9,584	12,698	3,114
Chermside West	6,661	6,673	12
Geebung	4,669	4,667	-2
Kedron - Gordon Park	13,972	14,252	280
Stafford	6,701	6,758	57
Stafford Heights	7,344	7,383	39
Wavell Heights	10,346	10,373	27
Nundah	39,531	44,345	4,814
Boondall	9,828	10,101	273
Brisbane Airport	148	152	4
Eagle Farm - Pinkenba	553	2,786	2,233
Northgate - Virginia	7,142	7,298	156
Nudgee - Banyo	9,930	10,288	358
Nundah	11,930	13,720	1,790
Sandgate	59,963	63,699	3,736
Bracken Ridge	18,148	18,964	816
Brighton (Qld)	9,734	10,086	352
Deagon	3,774	3,849	75
Sandgate - Shorncliffe	7,208	7,280	72
Taigum - Fitzgibbon	11,682	13,927	2,245
Zillmere	9,418	9,593	175
Brisbane - South (SA4)	352,081	380,683	28,602
Carindale	51,472	54,525	3,053
Camp Hill	11,700	11,930	230
Cannon Hill	5,192	6,410	1,218
Carina	11,173	11,677	504
Carina Heights	6,728	7,090	362
Carindale	16,679	17,418	739
Holland Park - Yeronga	74,767	83,746	8,979
Annerley	11,868	12,242	374
Coorparoo	16,627	18,173	1,546
Fairfield - Dutton Park	5,097	5,244	147
Greenslopes	9,982	10,442	460
Holland Park	8,641	8,909	268
Holland Park West	6,569	6,796	200
Woolloongabba	6,423	11,157	4,734
Yeronga	9,560	10,783	1,223
Mt Gravatt	72,942	81,374	8,432
Eight Mile Plains	16,311	17,259	948
Macgregor (Qld)	6,037	6,292	255
Macgregor (Qld) Mansfield (Qld)	9,049	9,057	8
mansheld (Qld)	7,047	7,007	0

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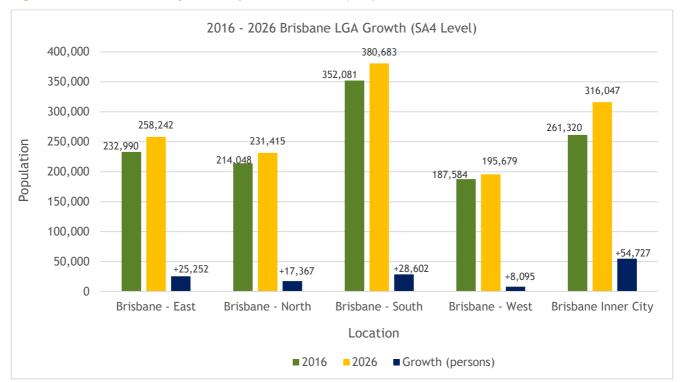
LOCATION	ESTIMATED 2016 POPULATION	PROJECTED 2026 POPULATION	Change 2016-2026
Mount Gravatt	15,603	17,280	1,677
Rochedale - Burbank	5,016	7,348	2,332
Upper Mount Gravatt	9,982	13,105	3,123
Wishart	10,944	11,033	89
Nathan	40,218	41,305	1,087
Coopers Plains	5,170	5,430	260
Moorooka	10,923	11,372	449
Robertson	5,388	5,534	146
Salisbury - Nathan	7,780	7,828	48
Tarragindi	10,956	11,141	185
Rocklea - Acacia Ridge	61,215	66,500	5,285
Algester	9,106	9,361	255
Calamvale - Stretton	21,948	24,174	2,226
Pallara - Willawong	4,754	6,409	1,655
Parkinson - Drewvale	15,968	16,899	931
Rocklea - Acacia Ridge	9,439	9,657	218
Sunnybank	51,467	53,233	1,766
Kuraby	8,688	9,150	462
Runcorn	15,159	15,931	772
Sunnybank	8,942	9,204	262
Sunnybank Hills	18,678	18,948	270
Brisbane - West	187,584	195,679	8,095
Centenary	34,667	35,496	829
Jindalee - Mount Ommaney	7,995	8,225	230
Middle Park - Jamboree Heights	7,677	7,692	15
Riverhills	4,099	4,214	115
Seventeen Mile Rocks - Sinnamon Park	10,116	10,545	429
Westlake	4,781	4,820	39
Kenmore - Brookfield - Moggill	47,797	48,949	1,152
Bellbowrie - Moggill	10,357	10,885	528
Brookfield - Kenmore Hills	7,428	7,525	97
Chapel Hill	10,924	11,112	188
Fig Tree Pocket	4,022	4,107	85
Kenmore	9,179	9,339	160
Pinjarra Hills - Pullenvale	5,887	5,981	94
Sherwood - Indooroopilly	52,846	56,058	3,212
Chelmer - Graceville	7,363	7,577	214
Corinda	5,160	5,418	258
Indooroopilly	12,841	14,238	1,397
Sherwood	5,876	6,129	253
St Lucia	12,753	13,217	464
Taringa	8,854	9,479	625
The Gap - Enoggera	52,274	55,176	2,902
Enoggera	8,846	9,777	931
Enoggera Reservoir	29	29	0
Keperra	7,440	7,570	130
Mitchelton	8,697	10,326	1,629
Michelton Mount Coot-tha	0,097	0	0
The Gap	17,326	17,524	198
Upper Kedron - Ferny Grove	9,936	9,951	15

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	ESTIMATED 2016 POPULATION	PROJECTED 2026 POPULATION	Change 2016-2026
Brisbane Inner City	261,320	316,047	54,727
Brisbane Inner	68,656	99,152	30,496
Brisbane City	10,248	12,800	2,552
Fortitude Valley	6,223	12,216	5,993
Highgate Hill	6,669	6,803	134
Kangaroo Point	8,545	9,923	1,378
New Farm	14,097	14,875	778
South Brisbane	6,920	17,664	10,744
Spring Hill	6,149	7,590	1,441
West End	9,806	17,281	7,475
Brisbane Inner - East	43,438	45,219	1,781
Balmoral	4,210	4,159	-51
Bulimba	7,188	7,888	700
East Brisbane	6,294	6,522	228
Hawthorne	5,723	5,870	147
Morningside - Seven Hills	13,200	13,609	409
Norman Park	6,823	7,170	347
Brisbane Inner - North	88,016	106,074	18,058
Albion	2,950	4,678	1,728
Alderley	6,451	6,896	445
Ascot	5,857	6,819	962
Clayfield	11,348	11,707	359
Grange	4,596	4,819	223
Hamilton (Qld)	5,973	7,519	1,546
Hendra	4,962	5,420	458
Kelvin Grove - Herston	9,513	10,860	1,347
Newmarket	5,216	5,518	302
Newstead - Bowen Hills	9,672	19,303	9,631
Wilston	4,418	4,565	147
Windsor	7,349	7,486	137
Wooloowin - Lutwyche	9,709	10,484	775
Brisbane Inner - West	61,210	65,602	4,392
Ashgrove	14,205	14,737	532
Auchenflower	5,930	6,019	89
Bardon	10,266	10,858	592
Paddington - Milton	12,464	13,170	706
Red Hill (Qld)	6,336	6,693	357
Toowong	12,009	14,125	2,116

Figure 2 below illustrates the current and 2026 projected growth at statistical area level. Major growth is projected in Brisbane Inner City (+54,727) and Brisbane South (+28,602).

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#### Figure 2: Brisbane LGA Projected Population Growth (SA4) 2016-2026

## 4. BBI Player Profile

This section provides an overview of BBI current participation/ membership, a breakdown of player catchments and a comparison with state wide trends.

#### 4.1 Brisbane Basketball Participation/ Membership

Past trends are also an indication of the ability of an association to sustain a strong membership base. BBI membership data from the past three years shows the organisation has experienced continual growth over a period of time and is evidence of the demand to play at the association.

Table 6 illustrates BBI player participation in competition/ programs over the past three years.

CATECODY		Ye	ARS					
CATEGORY	2013	2014	2015	2016				
Domestic Competition								
Senior Men	1,434	1,538	1,524	1,846				
Senior Women	347	388	385	303				
Junior Boys	1,000	1,138	1,138	1,248				
Junior Girls	485	433	397	391				
Total Teams	377	398	392	404				
Total Participants	3,266	3,497	3,444	3,788				
Development Programs								
Total Participants	120	227	523	ТВА				
Representative Program								
Junior	200	200	220	220				
Senior	50	50	50	50				
Total Teams	24	24	26	26				
Total Participants	250	250	270	270				

#### Table 6: Player participation 2013 - 2016

There is a significant disparity between male and female participation in the senior competition with nearly six times the number of male participants (85.9% of senior participation) than female participants (14.1% of senior participation). This trend is similar in the junior domestic competition with male teams representing 76.1% of junior teams compared with females (23.9%).

Table 7 summarises BBI total membership from 2014-2016. Numbers exclude volunteer, coaches, officials, administrators and Aussie Hoops players.

#### Table 7: Summary of BBI Membership 2014-2016

TOTAL NUMBER OF PLAYERS	2014	2015	2016
Seniors	1790	1761	2010
Juniors	1449	1735	1654
Total	3239	3496	3664

A review of basketball participation over the past three years indicates:



- The 2016 membership was 3,664 in 2016. Membership has increased each year since 2014. In the 2014-15 period, total membership increased 259 players (+7.9%) and in the 2015-16 period membership increased by 168 players (+4.8%).
- Membership growth trends for seniors and juniors have been inconsistent the past three years. For the period 2014-15 senior membership decreased slightly by 29 players (-1.62%) while junior membership increased 286 players (19.74%). For the period 2015-16 senior membership grew by 249 players (+14.14%) and junior membership decreased 81 players (-4.67%).
- The membership data represents active playing participants and do include the number of officials, volunteers, administrators and coaches that are also part of the association. The data does not include the 424 registered Aussie Hoops players in 2016.
- Of the current membership, 54.86% are senior players and 45.14% are junior players. BBI have a high percentage of senior players, which when compared to state based trends, there is generally a higher percentage of junior players. This indicates BBI have a successful pathway program from junior programs into senior competition.

### 4.2 Brisbane Basketball Membership Breakdown (by catchment area)

When planning for facilities, it is important to understand where the current catchment of registered players comes from, projected population growth area (refer to 3.2) will guide decision makers where future infrastructure should be located.

BBI membership data was mapped by suburb to determine the main catchment areas of existing players. BBI do not have a defined membership catchment area and as such, 528 registered players come from other localities - Moreton Bay 193 players (5.3%) Ipswich 151 players (4%) and Logan 67 players (1.8%). The remaining 2% of registered players reside on the Gold Coast, the Sunshine Coast and other locations around Australia. The remaining registered players were mapped to the following catchment areas within the City of Brisbane<sup>10</sup> (refer Table 8).

- Brisbane Inner City has the largest catchment, 1,318 registered players (32.19% of total). Projected population growth by 2026 +54,727.
- Brisbane West has the second highest catchment, 1,141 registered players (27.8% of total). Projected population growth by 2026 +8,095.
- Brisbane South, 689 registered players (16.83% of total). Projected population growth by 2026 +28,602.
- Brisbane East, 97 registered players (2.37% of total). Projected population growth by 2026 +25,252
- Brisbane North, 321 registered players (7.84% of total). Projected population growth by 2026 +17,367.

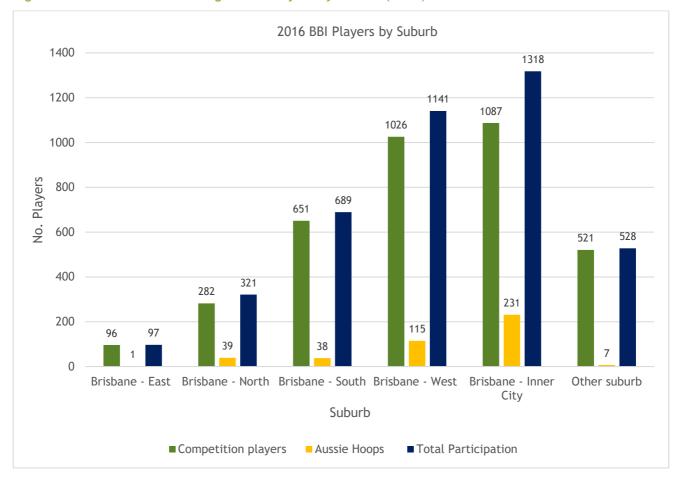
Location	Total Senior & Junior Competition Players	nior Competition Hoops Players Players Total BBI					
Brisbane - East	96	1	97	2.37%	2.7%		
Brisbane - North	282	39	321	7.84%	<b>9</b> %		
Brisbane - South	651	38	689	16.83%	19.3%		
Brisbane - West	1,026	115	1,141	27.87%	32%		
Brisbane - Inner City	1,087	231	1,318	32.19%	37%		
SUB TOTAL (Brisbane)	3,142	424	3,566	87.10%	100%		
Other suburb	521	7	528	12.90%	NA		
TOTAL	3,663 <sup>11</sup>	431	4,094	100%			

#### Table 8: BBI Registered Players by Suburb (2016)

<sup>&</sup>lt;sup>10</sup> Figures include competition players and Aussie Hoops players.

<sup>&</sup>lt;sup>11</sup> Suburban data supplied by BBI was 1 registered player less than the membership data

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#### Figure 3: Brisbane Basketball Registered Players by Suburb (2016)

## 4.3 Comparison with State Participation

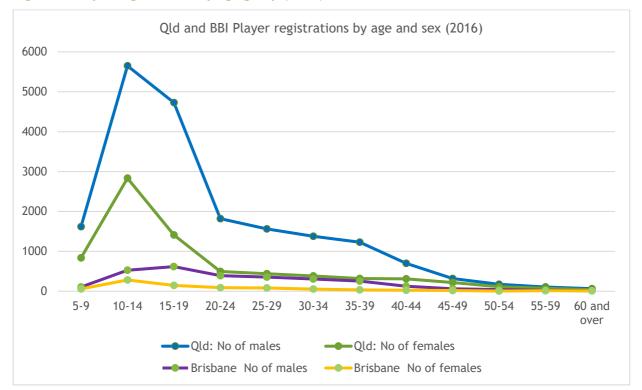
- The state participation rate for basketball in Queensland is 0.55% of population. The City of Brisbane has a basketball participation rate considerably higher than the state average (0.77%)<sup>12</sup>.
- BBI membership data for 2016 accounts for 40.6% total participants playing basketball in Brisbane<sup>13</sup>.
- Membership data provided by Basketball Queensland shows players aged 5 to 19 years account for almost two thirds (64%) of all basketball participation in Queensland<sup>14</sup>. BBI in comparison has a larger senior membership (54.9% of total membership) compared to junior membership (45.1% of total membership).
- Of the overall player registrations in Queensland, male players account for 61% of total player registrations. BBI in comparison has a considerably higher number of male players (77.6% of total membership) compared to females (22.4% of total membership).
- The disparity between male and female participation is a state-wide issue which is possibly the result of the increase in awareness and popularity of national women's sporting initiatives such as, Women's T20/ BBL and the inception of the national women's league to the AFL competition.

Figure 4 illustrates player registrations in Queensland and BBI by 5-year age cohorts. There is an obvious drop in participation upon entering senior age cohorts across the state. BBI show a more gradual decline in male participation upon entering senior age cohorts (>19years) while in comparison female participation drops significantly upon entering senior competition at both state and local level.

<sup>&</sup>lt;sup>12</sup> Basketball Qld State Facility Master Plan

<sup>&</sup>lt;sup>13</sup> Membership data was provided by Basketball Qld in the development of the State Facility Strategy.

<sup>&</sup>lt;sup>14</sup> Membership information used was provided by Basketball Queensland for the development of the State Facility Plan



#### Figure 4: Player registrations by age group (2016)



## 5. Projected Membership

The first step in projecting demands involves an assessment of current membership. Data on estimated 2016 population and projected 2026 in the Brisbane LGA was used to calculate membership projections. BBI membership was projected to 2026 using the current participation rate for each catchment area.

It should be noted there are 521 current competition players (14.2%) that reside outside of the Brisbane City boundaries, this includes 200 registered players from Moreton Bay LGA and 151 registered players from Ipswich LGA. To determine future membership, it is assumed the portion of players registered in other suburbs will remain consistent at 14.2%. However future facility provision in these areas may reduce the extent to which patrons are drawn from these suburbs.

Table 9 illustrates the following:

- Total current players
- 2016 competition players
- 2026 projected competition players based on the current participation rate and population growth,
- 2026 projected total players (including Aussie Hoops) based on the current participation rate and population growth.

Location	2016 Total Players	Percentage of Total BBI m'ship	2016 <u>Competition</u> <u>Players</u> *	2026 Projected <u>Competition</u> <u>Players*</u> based on current participation rate	2016-2026 Growth <u>Competition</u> <u>Players</u> *	2026 Projected Total Players based on current participation rate	2016-2026 Growth Total Players
Brisbane - East	97	2.37%	96	106	10	109	11
Brisbane - North	321	7.84%	282	305	23	347	26
Brisbane - South	689	16.83%	651	704	53	745	94
Brisbane - West	1,141	27.87%	1,026	1070	44	1190	49
Brisbane - Inner City	1,318	32.19%	1,087	1315	228	1594	279
Sub Total	3,566	87.1%	3,142	3,500	358	3985	456
Other	528	12.90%	521	578 <sup>15</sup>	58	590 <sup>16</sup>	62
TOTAL	4,094	100%	3,663 <sup>17*</sup>	4,078*	373*	4,575	518
*Does not include Aus	sie Hoops par	ticipation data					

#### Table 9: Projected BBI Membership Based on Current Participation

### 5.1 Population and Existing/ Planned Indoor Multi-Court Provision

This section of the report uses maps to illustrate the locations and distribution of current facilities nominated as being used by BBI as well as illustrating where the catchment of players is coming from. Only indoor multi-court facilities used for basketball competition were mapped.

The maps illustrate the following;

• Map 1 illustrates the 2016 catchment of players and existing facilities used for basketball competition. Of the facilities used by BBI, there are three indoor facilities located in the high catchment area of Brisbane Inner City, two are owned by education.

<sup>&</sup>lt;sup>15</sup> The current percentage of <u>competition players</u> residing outside of Brisbane (521/3142 = 16.5%). 3500\*16.5%=579. This is equivalent to 14.2% of the total competition players.

<sup>&</sup>lt;sup>16</sup> 3985 + 12.9% which is the current percentage of total players residing outside of Brisbane (528/4094 = 12.9%)

<sup>&</sup>lt;sup>17</sup> The suburban membership data provided was one less player (3,663) than junior and senior membership data provided (3,664)

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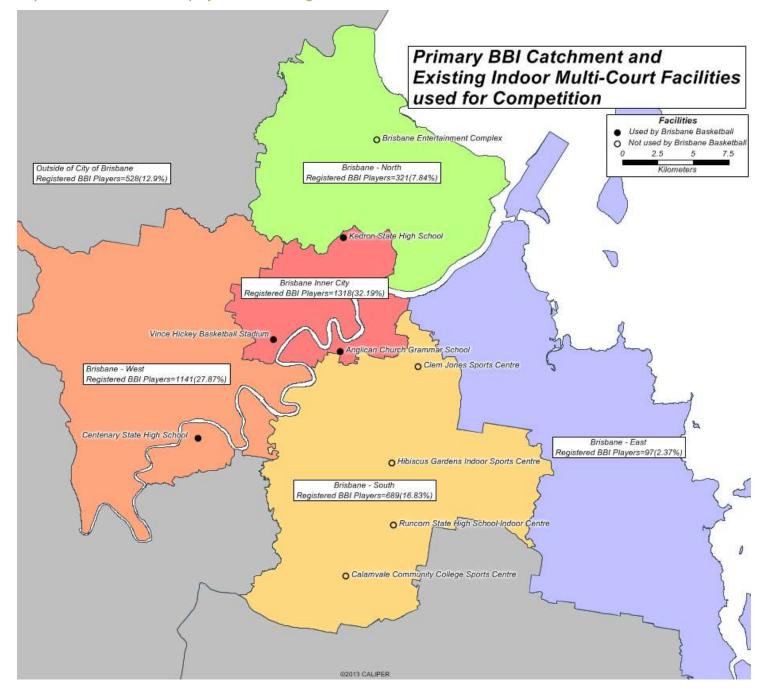


- Map 2 illustrates existing indoor multi-court facilities used for basketball competition and the 2016 population distribution. High population areas are mapped in red, orange and yellow. Areas within Brisbane Inner City where BBI currently operates illustrates the lack of provision of indoor multi-court facilities for competition.
- Map 3 illustrates the projected population growth 2016-2026 and existing/ planned indoor multi-court facilities in Brisbane. BBI highest catchment area in Brisbane inner city is projected to experience the greatest growth in population over the next decade. Brisbane City Council has no plans to provide new indoor courts prior to 2026.<sup>18</sup>

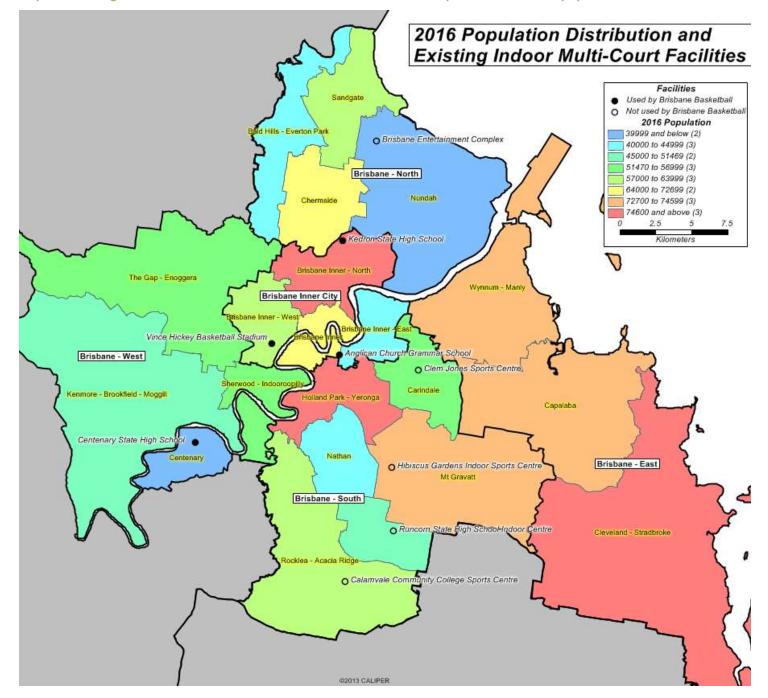


Photo courtesy of BBI Facebook Page

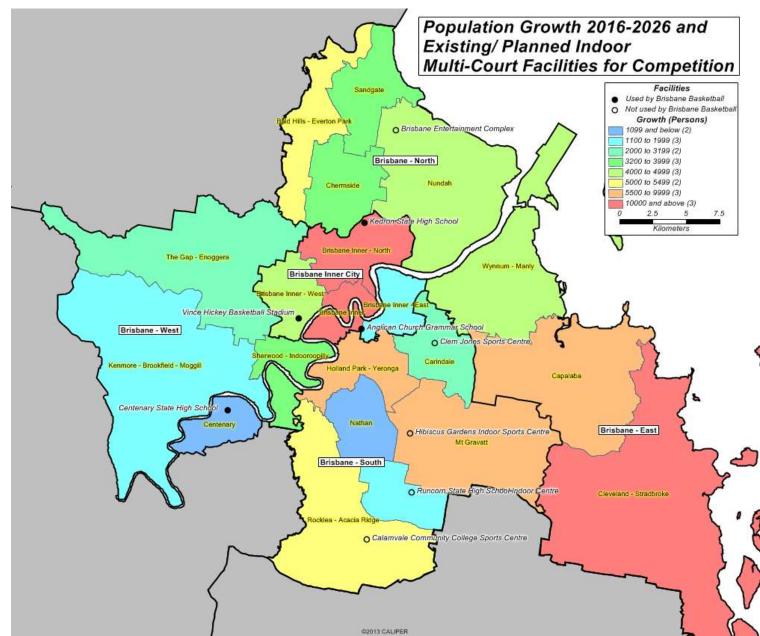
<sup>&</sup>lt;sup>18</sup> Brisbane City Council has earmarked South Brisbane as an area for future development of an indoor sport centre but is expected to be completed until between 2026-2031 (refer section 7.1.5).



#### Map 1: 2016 catchment of players and existing facilities



#### Map 2: Existing indoor multi-court facilities used for basketball competition and 2016 population



#### Map 3: Population growth and existing/ planned multi-court facilities in Brisbane



## 6. Possible Implications for Indoor Multi-Court Facilities

A critical issue for court sports is the provision of multi-court facilities that allow for the efficient running of competitions. Findings from state facility strategies in Queensland, NSW and Victoria found that in most cases, participation rates are higher in regions where basketball has better access to multi-court facilities for competition. The plans found that the level of court provision, the hours allocated during peak times, and the number of locations volunteers/ players travel, impacts on the level of participation.

Brisbane is anticipated to undergo significant growth over the next ten years with population estimated to increase from an estimated 1,176,807 in 2016 to 1,305,187 people by 2026. This growth, coupled with a younger age demographic that are more likely to participate in organised sport, will increase the burden on existing venues that are already at critical capacity levels and/ or increase demand for additional facilities in growth areas.

The Queensland Basketball State Facility Strategy found there are numerous single court facilities are scattered throughout Brisbane - almost all in schools and tertiary institutions - many of which have design or access constraints which limit their effectiveness. While suitable for some competitive activities and training purposes, single court facilities are generally not functional for running basketball competitions. Reviews of indoor sporting facilities undertaken by Otium Planning Group team members have found facilities with a minimum of 4-courts are more financially viable, are able to be managed more efficiently (centralised competitions), and are the most socially viable (parents/ referees not having to attend multiple venues). CERM data<sup>19</sup> indicates that indoor venues with a size of 3,000m<sup>2</sup>+ have the highest median expense recovery ratio of 92% and attract a vastly higher median number of visits than smaller facilities.

Compounding the issue, facilities owned by education are in high demand by other community groups such as volleyball, futsal, martial arts, dance, netball and church groups, and decreases the opportunity to hire the courts during peak times for basketball competition. School use takes priority, and associations' access to venues during peak time can be impacted, often from last minute changes requested by the school.

<sup>&</sup>lt;sup>19</sup> CERM is the University of South Australia's 'Centre for Environmental and Recreation Management' and is recognised nationally for the development of performance indicators for indoor sporting centres, and aquatic & leisure centres. CERM PI® data measures operational management efficiency (cost recovery, operational ratios, catchment usage rates, secondary spending etc). Participation and provision of information is on a voluntary subscription basis. Most facilities on the CERM database are local government owned. Data for indoor centres is segmented by the size (m<sup>2</sup>) of the facility. Data from 2014 CERM report was utilised.



## 7. Research and Trends

### 7.1 Literature Review

Several documents relevant to this study were reviewed to assist the study context. A summary of key findings relevant to this study from these documents are outlined below:

#### 7.1.1 Basketball Queensland State Facility Plan

Otium Planning Group were commissioned in July 2016 to develop a state facility strategy for Basketball Queensland (BQ). The intent of the plan was to respond is a strategic way to existing facility pressures and future demands brought about by projected population growth. The plan will enable BQ to identify facility needs and prioritise them accordingly.

The key findings from the strategy that are relevant to this study are:

- The LGA of Brisbane had an overall participation rate in basketball of 0.77% which is above the Queensland average of 0.55%. The Queensland findings are consistent with key findings of the NSW Basketball and Basketball Victoria state facility plans found that the level of court provision, the hours allocated during peak times, and the number of locations volunteers/ players travel, impacts on the level of participation.
- The facility inventory showed a heavy reliance on the education sector for the provision of indoor sporting facilities in Brisbane. The majority of these facilities are single courts, while suitable for training purposes, single court facilities are generally not functional for conducting competitions in court sports such as basketball, as only limited player numbers can be accommodated in an evening and the economies of scale for officials gained in multi-court facilities are absent.
- Key recommendations from the study conservatively found an immediate (2016) shortfall of courts for competition of 3 8 courts in the Brisbane LGA. By 2026, assuming current participation increases in a linear progression and the provision of indoor courts for basketball does not increase, the shortfall of courts for basketball competition will rise to between 5 11 indoor courts.
- The study highlights the lack of a state facility in Brisbane, the state capital. The current developments on the Gold Coast in preparation for the Commonwealth Games are the only state level facilities in Queensland, despite association membership in the Brisbane LGA comprising over one third (34%) of Basketball Queensland's total registered players.

#### 7.1.2 Brisbane Basketball Incorporated Strategic Plan (2016-18)

The BBI Strategic Plan states the overall mission of the organisation to "To be an inclusive organisation for enjoying basketball in a welcoming, safe and healthy environment."

The current membership catchment extends from western suburbs to Springfield and north towards Albany Creek and east through Kedron up to Chermside (including Brisbane CBD and nearby surrounding areas). The 2016-18 strategic plan focusses on improving four key priority focus areas:

- 1. Stadium facilities,
- 2. Participation
- 3. Governance, and
- **4.** Community engagement.

Relevant to this study are:

- Key Priority Focus Area 1: Stadium facilities:
- Objective 1.3: Deliver a 4-court stadium. Action item includes completing a current and future needs project brief.



#### 7.1.3 Brisbane Vision 2031

Brisbane Vision 2031 is Council's long-term community plan for the city. It details the aspirations for the city's future and outlines ideas for achieving this vision.

The main priorities for Brisbane Vision 2031 are to:

- Maintain or improve quality of life for the Brisbane community
- Ensure that Brisbane has the services and infrastructure to meet the liveability and sustainability challenges of the future
- Provide an overarching plan of action for Council, its partners and the people of Brisbane for the next 18 years.

Relevant to this study is Theme 2 "Our Active, Healthy City" where Brisbane City Council aims to:

- Increase the proportion of adults participating in at least 30 minutes of moderate physical activity, on five or more days of the week, by 15% from baseline by 2018.
- Contribute to the performance benchmark to return the proportion of adults at healthy weight to baseline level by 2018.
- By 2031, participation in Council's 'Active and Healthy' activities will increase compared to 2013.
- An accessible network of parks and recreation facilities that meets the needs of Brisbane's residents will be provided by 2031.

Brisbane City Council will aim to ensure all Brisbane residents have access to achieve active and healthy lifestyles and will ensure public spaces, parks, community venues, sporting facilities and clubs are easy to access and provide safe, diverse opportunities for everyone to meet, play and exercise.

#### 7.1.4 Brisbane City Corporate plan 2016-17 & 2020-21

The Corporate Plan 2016-17 to 2020-21 describes the medium-term objectives and priority actions of each Council program area and business unit that contribute towards achieving the Brisbane Vision to support a city that is liveable, vibrant, accessible and sustainable.

Relevant to this study is the 'Your Brisbane' program which aims to support the community by focussing on social and cultural wellbeing. Council will aim to achieve this by the following objectives and key actions:

- Partner to deliver and maintain quality buildings, sports fields and hard courts to facilitate healthy and active communities.
- Work in partnership with community lessees to ensure that the management of community facilities reflects community need and optimises use of the facility.

#### 7.1.5 Land for Community Purposes - Schedule of works (Brisbane City Council

Brisbane City Council has earmarked South Brisbane as an area for future development of an indoor sport centre. The project will cost (at NPV) \$4,898,610 to acquire the land, prepare the site and connect to services. This excludes construction, development/ design and refurbishment costs. It is expected the project will be completed between 2026-2031.

#### 7.1.6 Brisbane City Plan, 2014 Strategic Plan

Brisbane has a broad range of community facilities that support the community's recreational, cultural and social activities, promote the physical, cultural and social wellbeing of the community.

The strategic intent relevant to this study is:

• *Outstanding Lifestyle* which recognises areas of intense growth require improved level of infrastructure and facility upgrades to meet the increased demand.



## 7.2 Analysis of Trends

The following provides a review of the trends in sport and recreation planning and facility provision that are relevant to this study.

#### 7.2.1 Generic Trends

The following general trends in sport and recreation are evident:

- Many individuals and families are time poor and the scheduling of activities at times that are convenient to them is increasingly important.
- There is a desire by many participants to simply "turn up and play" with minimal volunteering commitments. Many participants are willing to pay extra for this service which has created some opportunities for commercial provision.
- Participation in organised sport is generally static but there is growing demand for social forms of participation in sport.
- Local governments are recognising the importance of creating environments to enable people to lead active and healthy lives, placing greater focus on integration with urban planning, provision and/ or connectivity of walk/ cycle paths, provision of sport and recreation facilities and programs, and provision and access to parks and open space.
- Volunteerism is declining in many sport and recreation organisations. This is placing greater pressure on the remaining volunteer base and may impact on participation levels and/ or costs in future if services that were once provided voluntarily need to be paid for.
- Declining volunteerism is also placing greater pressure on Councils in terms of the way they manage sports facilities on their land.
- There is an awareness of the importance of "risk management" and the need for a "whole-of-life" approach to facility development and asset management.
- Multiple use of sport and recreation facilities, season overlap and across season usage is becoming more prevalent in response to limited supply in some areas.
- New methods to maximise use of sport and recreation facilities are being explored (e.g. community/ cultural events, off season sports, non-traditional sports).
- Demographic shift, especially in larger cities, is changing the patterns of participation in sport and recreation.
- Many sports peak bodies are responding to social and demographic trends by introducing modified forms of participation and scheduling.

#### 7.2.2 Trends in Planning and Design

Trends in planning and design include:

- The planning process for new facilities has improved significantly with the conduct of effective feasibility studies being the norm. These studies have generally included management/ marketing/ financial plans with demand projections based on sophisticated survey data.
- There is a strong trend away from single purpose facilities towards multi-purpose facilities, however facilities need to be designed to ensure they can meet the specific needs of key user groups.
- Contemporary planning seeks to create, where possible, 'community hubs' for sport and recreation that can meet a broader range of needs, and facilitate higher utilisation and viability.
- More flexible designs are being created and there is a growing expectation that facilities will need to be renovated/ upgraded on a periodic basis. There is a realisation that facilities have a "customer interest life-span", which is much less than the facilities life-span.
- Sport facility designs are increasingly required to cater for different levels and standards of competition.
- Provision for socialising spaces is a key component of facility design.
- Environmentally sustainable design of facilities are pre-requisites.
- Toilets and change rooms are expected to be adequate in size, accessible to playing areas and PWD compliant.
- Accessibility to facilities, particularly via walking and cycling is increasingly important.

#### 7.2.3 Multi-purpose Indoor Court Facilities

Trends associated with multi-purpose indoor court facilities include:

- A minimum of three to four courts is generally required to support the effective sustainability of indoor court facilities. Generally, centres with fewer than three courts have a lower income generating capacity and lower likelihood of being financially viable.
- There is a high reliance on the use of indoor facilities provided by public or private schools or tertiary institutions in Queensland (especially Brisbane) which can create access constraints
- Higher quality finishes, including higher quality amenities, wall finishes, lighting, audio/ visual and seating are incorporated to support broader community and cultural events.
- Food and beverage facilities are being designed to have the capacity to support larger scale sporting and community/ cultural events.
- Incorporation of indoor court facilities as part of a broader leisure facility mix can result in a range of economies of scale including reduced staffing costs, increased buying power and improved energy rates. Facilities that are designed to be "multi-use" are generally operated at higher levels of usage capacity and financial performance than single sport/ specialist facilities.
- Single court facilities are less functional and there is intense competition for access to indoor courts during peak times in many areas. Larger, centralised facilities are more efficient in terms of both competition coordination and financial sustainability.
- Effective ESD outcomes are being incorporated to improve airflow and reduce the need for artificial lighting.
- The reduction in commitment to curriculum based school sports in State Schools may have impacts on the local availability of school sports facilities while also discouraging public sector investment in new facilities at these sites.

#### 7.2.4 Financial Performance of Indoor Sports Facilities

The following relevant trends in the financial performance of indoor sporting facilities:

- Facilities that are designed and operated to be "multiuse" generally operate at higher levels of usage capacity and financial performance than single sport/specialist facilities.
- Large regional facilities with four or more courts that are centrally located in large catchment areas, with a low level of competition, in prominent positions have a greater chance of being financially viable.
- With ongoing Government economic constraints and limited capital and operational budgets, new sports facilities may need to consider joint venture arrangements between private and public sectors and sports associations.
- Due to restricted rate and other revenue bases, local Councils, may have to encourage greater private investment in leisure facilities and services. This may be achieved by a mix of rate concessions, payback loans, management rights in return for investment, provision of land and planning concessions.



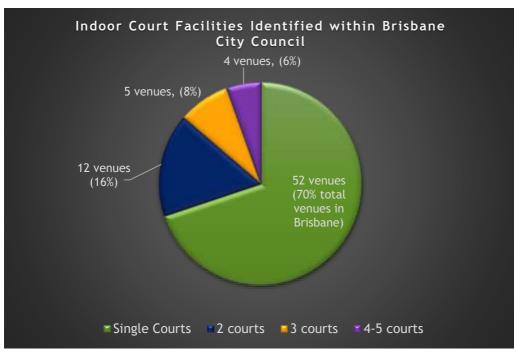
## 8. Brisbane Indoor Multi-Court Review

## 8.1 Current Facility Provision

Brisbane has numerous single court facilities scattered throughout city - almost all in schools and tertiary institutions - many of which have design or access constraints which limit their effectiveness.

The majority of 2-3 court venues utilised for basketball competition are located within schools. BBI utilise Anglican Church Grammar, Kedron State High School and Centenary State High School for competition while other clubs and associations utilise Calamvale Community College Sports Centre, and Runcorn State High.

There are three 4-court facilities located in Brisbane. BBI currently utilises the Vince Hickey Stadium to capacity while other clubs and associations utilise the Clem Jones Centre and the Hibiscus Indoor Stadium all of which are at capacity. The only 5-court facility in Brisbane is the Brisbane Entertainment Complex (Boondall) which is heavily utilised and at capacity.



#### Figure 5: Indoor court facilities identified in the Brisbane LGA

#### 8.2 Occupancy Review of Facilities by Brisbane Basketball

Industry trends indicate that peak hour usage for indoor sports courts in Queensland is typically between the hours of 4:00pm to 10:00pm Monday to Friday (competitions typically begin from 6:00pm and sometimes go through to 11:00pm) and 9:00am to 5:00pm on Saturdays and Sundays. These times will alter slightly if the facilities are based at a school facility.

This section of the report provides a summary of the occupancy of the indoor courts used by BBI (for the occupancy tables refer Appendix 0)

Of the current available indoor multi-court facilities, BBI use the following facilities for competition:

- Vince Hickey Stadium 4-courts
- Anglican Church Grammar 3-courts
- Kedron State High School 2-courts
- Centenary State High School 2-courts
- Brisbane Boys College 2-courts (BBI advise hire in 2017 is problematic and not reliable)



#### 8.2.1 Vince Hickey Basketball Stadium, Auchenflower

The stadium is currently available for use 452<sup>20</sup> court hours per week based on the following times:

#### Weekdays (Monday - Friday)

- Peak = 120 hours (4pm 10pm)
- Off Peak = 200 hours (6am 4pm)

#### Weekends (Saturday and Sunday)

- Saturday = 68 hours (6am 11pm)
- Sunday = 64 hours (6am 10pm)

#### Total hours currently available = 452 hours

- The Stadium occupies 291.5 hours (64.5%) for basketball activities of the total 452 hours available.
- Weekday peak usage accounts for 120 hours (100%) of total peak hours. This is between the hours of 4:00pm 10:00pm (120 hours) Monday Friday.
- Weekday off peak usage accounts for 59 hours (29.5%) of total off-peak use hours (200 hours).
- Average weekend use accounts for 116 hours (88%) of total weekend hours. This is between the hours of Saturday 7:30am 9:00pm and Sunday 6:00am 10:00pm. As previously mentioned peak hours for operating indoor sports courts on the weekend is generally between 9:00am 5:00pm. This means BBI are opening the facility 13 hours more than the industry average to cater for the demand of members.

The current facility is at full capacity during the peak operating hours for indoor sports courts and as a result is unable to accommodate any current or future additional usage or demand.

BBI is providing access to the facility well beyond industry trends such is the demand from the members. This indicates a strong demand to play basketball and demonstrates BBI willingness to the open the stadium for longer duration of time to satisfy the demand of players.

## In summary, the Vince Hickey Stadium is at capacity during peak hours during the season and is unable to accommodate any more activities during these times.

#### 8.2.2 Anglican Church Grammar

The following provides a summary of the current usage of three courts at Anglican Grammar School.

- Anglican Grammar School utilise the facility for Monday Friday from 6am 6:30pm which is primarily booked for volleyball.
- Community groups are able to hire the courts from 6:30pm 10pm Monday Friday.
- Brisbane Basketball utilise the courts Wednesday 6:30pm 9pm (competition and representative training) and Friday 6:30pm 9pm (junior competition).
- The facility is booked out by other community groups Monday, Tuesday and Friday.
- Saturday use is restricted for school teams in volleyball and basketball of which there are generally four home games per season.
- There is some spare court capacity on Sunday.

#### 8.2.3 Kedron State High

The following provides a summary of the current usage of two courts at Kedron State High.

- From the 1<sup>st</sup> October to 1<sup>st</sup> March the facility is booked by indoor hockey seven days a week.
- From 2<sup>nd</sup> March to 30<sup>th</sup> September the facility is booked Thursday, Friday, Saturday and Sunday.
- BBI currently utilise Kedron State High School for competition on Friday 6pm 10pm and Sunday 9am 2pm.

<sup>&</sup>lt;sup>20</sup> The weekday time the courts are available for use was based on 6am - 10pm although it is recognised some nights the courts are utilised until 11pm.



#### 8.2.4 Centenary State High School

The following provides a summary of the current usage of the three courts at Centenary State High School.

- BBI utilise the facility for some training Monday Friday as required and QBL games on Saturday from 7:30am 1pm.
- The school was contacted to ascertain if there was any spare capacity at the venue Monday to Friday during peak times. OPG were informed that in addition to BBI usage the venue is heavily utilised by the school basketball team, futsal, St Aidens Secondary College, Qld Secondary Schools, cultural groups and martial arts/ karate groups.
- The venue is heavily utilised on the weekends, however, there is some capacity to cater for bookings however booking requests are required well in advance.

#### 8.2.5 Brisbane State High School

The following provides a summary of the current usage of the two courts at Brisbane State High School.

- BBI utilise the facility for senior representative training Monday and Thursday from 6:00pm 9:00pm
  The venue is not used for competition.
- The school uses the facility until 6pm Monday to Friday. There is spare capacity on Wednesday and Friday from 6pm.

#### 8.2.6 Brisbane Boys College

BBI currently use the facility Friday 6pm - 8pm for junior competition. From discussions with BBI and information collected for the BQ State Facility Plan, hire of this facility is problematic and unlikely to be able to be relied on.

### 8.3 Summary

The following is a summary of current usage at facilities (not including Vince Hickey Stadium) during peak hours from Monday - Friday 4:00pm - 10:00pm.

- 39 hours are currently being utilised for competition at multi-court venues located within schools.
- 19.5 hours are currently being utilised at single court facilities located within schools generally for Aussie Hoops programs and representative training.

The total number of hours BBI are unable to accommodate at the Vince Hickey Stadium during weekdays during peak hours = 58.5 hours

The total number of hours BBI are unable to accommodate at the Vince Hickey Stadium during weekends = 24.5 hours.

The total number of hours BBI are unable to accommodate at the Vince Hickey Stadium during peak hours = 83 hours.

The total number of <u>competition</u> hours BBI is unable to accommodate at Vince Hickey Stadium during peak hours = 42.5 hours.

#### 8.4 Facility Hire Costs

Table 13 illustrates the financial investment BBI are contributing to provide registered players the opportunity to play during peak hours. The annual outlay of hiring alternative venues indicates strong financial capacity of the organisation.

Schools with indoor multi-court facilities informed OPG their venues are at capacity Monday - Friday but in some cases, there is spare capacity on the weekend. Venue operators did highlight school events such as presentation nights, take precedence over external bookings and as such, bookings may be cancelled without adequate prior warning to basketball administrators.



#### Table 10: Cost of venues hired by Brisbane Basketball for competition and training

Other multi-court venues in the Brisbane LGA informed Otium Planning Group that they are at or near full capacity during peak times and their venues are in high demand from a range of different user groups.

Based on the figures in Table 11, a basketball court in Brisbane has the potential to generate a rental income of between \$1,150 - \$2,100 per court during the week during peak times and between \$880 - \$1,120 per court on the weekend (based on 8hours per day).

#### Table 11: Multi-court facilities in City of Brisbane not utilised by BBI

VENUE	No. Courts	HOURLY RATE		Spare Capacity during peak times
		Peak	Off-peak	
Runcorn State High School	2	\$70 (\$500 bond)	N/A	Mon - Fri: No spare capacity Weekends: Courts booked Sat: 8am - 12pm & 4-5pm & Sun: 1pm-3pm. Some spare capacity.
Hibiscus Indoor Stadium	4	\$38.50- \$53.50	\$36	Mon - Fri: No spare capacity Weekends: Some spare capacity
Clem Jones Stadium	4	Mon-Fri \$55-\$65 Weekend \$55-\$70	\$5 shoot or \$45	No spare capacity
Calamvale State High	3	TBC		Mon - Fri: No spare capacity Sat: 3 courts available 12pm-5pm Sunday: 3 courts available 9am-3pm
Brisbane Entertainment Centre	5	\$57.50+GST	\$49.50+GST	No spare capacity



## 9. BBI Immediate and Future Shortfall of Indoor Courts for Basketball Competition

The first step in projecting demands involves an assessment of current membership. Estimated 2016 population and projected 2026 population data by existing catchment area (refer Table 4, p 11) was analysed to calculate membership projections. The membership calculations can then be used to inform the modelling of current and future facility needs (refer section 9.2 and below 9.3).

#### Table 12 Current and projected BBI membership

2016 Current Membership	2026 Projected Membership Based on Current Catchment Suburbs
3,664 <sup>21</sup>	4,078

### 9.1 Projected demand for indoor multi-court facilities

The assessment of current (2016) and future (2026) needs for multi-court indoor facilities takes into account the following:

- Current indoor multi-court facility provision
- Current usage as supplied by BBI
- Current basketball membership
- Estimates of projected population within the city of Brisbane
- Proposed court provision in the city of Brisbane
- Modelling of court needs for current and projected membership

Two models for calculating court demands have been developed by Otium Planning Group - a 'Participation Model' based on usage assumptions for competition, and a 'Standards Model' based on court carrying capacity developed in recent basketball facility strategies.

### 9.2 Participation Model

A participation based model was used to assist in determining current and future indoor court needs for competition use for BBI. It incorporates a set of assumptions, based on Otium Planning Group experience and data provided by BBI.

The outputs of the model are broad and do not account for social competitions or one-off championships. The following assumptions are contained in the participation model:

#### Assumption One

The ratio of junior and senior players are assumed to be as follows<sup>22</sup>:

- 45% of players are aged 19 years and under (1,654/3,664)
- 55% of players are aged over 19 years (2010/3,664)

#### Assumption Two

A single indoor can accommodate a maximum of 30 court hours per week based on the following estimates of peak competition demand times:

- Monday Friday: 6:00pm 10:00pm
- Saturday and Sunday: 10 hours across the weekend (typically between 9:00am 5:00pm)

<sup>&</sup>lt;sup>21</sup> Competition player numbers was used.

<sup>&</sup>lt;sup>22</sup> Suburban data provided used in membership projections based on locality (3,663) is one less player than membership data provided (3,664). Junior and senior membership breakdown was not provided as part of the suburban information.



The model is based on competition demand only, however training use typically occurs between 4.00pm and 6.00pm and on weekends.

#### Assumption Three

The player composition of domestic and representative teams is as follows:

- A junior domestic team will have on average 8 players per team.
- A senior domestic team will have on average 7 players per team.
- A junior representative team will have on average 10 players per team.
- A senior representative team will have on average 15 players per team.

#### Assumption Four

A proportion of players will also play in representative teams. It is assumed that:

- 13% of junior players will play in a representative team.
- 3% of senior players will play in a representative team.

#### Assumption Five

It is assumed the duration of a domestic competition game, including changeover and half time, on average will be 50 minutes comprising:

- 3-5 minute warm-up/ changeover
- Four game periods of 10 minutes each
- Intervals of one minute between the second and third period
- Half time of 2-3 minutes

The Participation Model was then applied to the current and projected BBI membership based on population growth to determine multi-court facility needs for competition as at 2016 and 2026.

Total available supply is based on available multi-court hours for BBI competition within the BBI catchment area expressed as a number of courts full-time equivalent courts used for competition. The figure is calculated at 4 courts at Vince Hickey Stadium and 1.1 courts at other multi-court venues.

Table 13: Participation Model - 2016 and 2026 demand and shortfall of indoor courts	for competition
---	-----------------

2016 current m'ship*	2026 projected m'ship based on current participation	Current full- time access to multi court venues for competition	Current demand for courts for based on current m'ship based on the participation model	Immediate shortfall of courts for competition based on current m'ship	2026 number of courts required for competition at multi-court venues based on projected m'ship based on current participation	2026 shortage of courts for competition in multi-court venues based on current participation
3,664	4,078	5	7	2	8	3

The 'Participation Model' shows an immediate shortfall of 2-indoor courts for competition based on current membership. If the provision of indoor courts remains unchanged by 2026 there will be a shortfall of 3-indoor courts for competition under this model.

### 9.3 Standards Model

To test the outputs of the Participation Model, a 'Standards Model' was also applied to assess current (2016) and projected (2026) shortfalls in the provision of multi-court facilities for basketball competitions for BBI. As with the Participation Model, the Standards Model does not account for social competitions or one-off championships.



The 'Standards Model' was derived from findings of similar studies in Victoria<sup>23</sup> and NSW<sup>24</sup> which determined that, on average, a basketball court can accommodate between 300-500 players. It is recognised that associations may adopt different competition formats and that variations in capacity will occur depending on a range of factors including the extent of representative team demands. The mid-point of 400 players/ court was therefore adopted.

The 'Standards Model' of 1:400 was then applied to the 2016 current and 2026 projected membership data of BBI to determine multi-court facility needs.

Table 14: Standards Model - 2016 and 2026 demand and shortfall of indoor courts for competition

2016 current competition players	2026 competition players	Current full-time access to multi court venues for competition	Current demand for courts for competition in multi-court venues with a court: player ratio of 1:400 based on current participation	Immediate shortfall of courts for competition based on a court: player ratio of 1:400 based on current m'ship	2026 number of courts required for competition at multi-court venues based on projected m'ship based on current participation	2026 shortage of courts for competition in multi-court venues based on a court: player ratio of 1:400 based on current participation
3,664	4,078	5	9	4	10	5

The 'Standards Model' shows an immediate shortfall of 4-indoor courts for competition based on current membership. If the provision of indoor courts remains unchanged by 2026 there will be a shortfall of 5-indoor courts for competition.

## 9.4 Summary of Shortfall of Courts for Competition

#### 9.4.1 Summary of 2016 Shortfall

It is evident there is a shortage of indoor multi-court facilities to meet basketball demand in the City of Brisbane. Based on BBI's current membership participating in competition, there is an immediate undersupply of 2 to 4-indoor courts for competition at multi-court venues.

There are no known new facility developments that are already underway or about to commence in the City of Brisbane that will impact on the calculations. Alternative venues for basketball competition are generally all at capacity (refer Table 10 and Table 11).

#### 9.4.2 Summary of 2026 Shortfall

<u>If no additional courts are provided in the interim</u>, by 2026, population growth will increase the shortfall in indoor courts for competition required to meet BBI's projected competition player membership to between 3 to 5 courts (refer Table 5, Brisbane Projected Growth by Suburb (medium series) p8). This does not take account of unmet latent demand and assumes current rates of participation remain constant, so the projected shortfalls could be considered conservative.

### 9.5 Annual visitation

The annual visitation to Vince Hickey Stadium is approximately 165,436 (refer Table 15)<sup>25</sup>. This figure includes players, coaches, referees and scorers but excludes spectators and one-off major competitions.

<sup>&</sup>lt;sup>23</sup> Victorian Basketball Facility Strategy, 2012

<sup>&</sup>lt;sup>24</sup> NSW Basketball Facility Strategy, 2016

<sup>&</sup>lt;sup>25</sup> Figures based on information provided by BBI and assumptions at Section 9.2



Type of competition	Players per team (assumption 3)	No. Officials	Weeks in a season	Games per week	Total visits per year
Junior domestic	8 players per team	6	6	40	5,040
	(16 total)		(Pre-season)		
			15	88	27,720
			(Championship		
Coniex demostie		4	season) 22	10/	44.07(
Senior domestic	7 players per team (14 total)	4	(Summer season)	106	41,976
	(14 lolal)		(Summer season) 22	102	40, 202
			(Winter season)	102	40,392
lunior representative	10 players per	8	12	13	4,992
Junior representative	teams + 2 on bench	0	12	15	4,992
	for each team				
	(24 total)				
Senior representative	15 players per team	8	17	18	11,628
(QBL)	(30 total)				
Senior representative	15 players per team	8	17	14	9,044
(SBL)	(30 total)				
Ladies daytime	7 players per team	4	40	10	7,200
competition	(14 total)				
Aussie Hoops	12 players	2	32	7	3,136
Scrimmage	10 players		40	2	800
Junior representative training	10 players	2	20	15	3,600
Acceleration Australia	150 players		50		7,500
Individual sessions	5 players	1	30	2	360
School holiday clinics	120 players	8	4	4 days	2,048
	•	•	TOTAL V	ISITS PER YEAR	165,436

#### Table 15: Annual Visitation to Vince Hickey Stadium

## Appendix 1: Indicative Facility Layout

An indicative layout for a six-court facility is illustrated below.



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CONCEPT DEVELOPMENT OPTIONS

PROFESSION NO.

31-0022

GROUND FLOOR PLAN

10-11-2016

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Image reproduced courtesy of Peddle Thorp architects

## Appendix 2: Usage Summary of Vince Hickey Stadium

### Table 16: Peak Season use at Vince Hickey Stadium

Peak Season	1				1				1		AUCI	HENFLO	OWER				-				1							
TIMESLOT		MON	IDAY			TUE	SDAY			WEDN	IESDAY			THUR	SDAY			FRI	DAY			SATU	RDAY SUNDAY					
OFF-PEAK TIME	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
6.00 - 7.00am																												
7.00 - 7.30am																												
7.30 - 8.00am																												
8.00 - 9.00am																												
9.00 - 10.00am																												
10.00-11.00am																												
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7.00 -8.00pm																												
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9.00 -10.00pm																												
10.00 -11.00pm																												Τ

 Court 1
 49

 Court 2
 77

 Court 3
 63.5

 Court 4
 79

Junior Comp U15- U19	
Junior Comp U9 - U13	
Senior Comp	
Ladies daytime	
Aussie Hoops	
QBL Men and	
Women	
SBL Men and	
Women	
Acceleration Aust	
Training	
Jun Rep Training	
Individual Sessions	
Scrimmage	
External hire -	
social	

External Hirer 2017

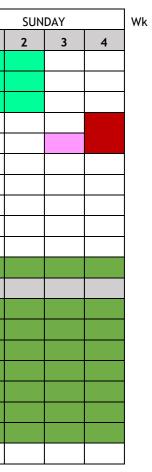


59 70

#### Table 17: Off-season use at Vince Hickey Stadium

					-						AUC	HENFLO	WER												
TIMESLOT	MONDAY			TUESDAY				WEDNESDAY				THURSDAY			FRIDAY				SATURDAY			_			
OFF-PEAK TIME	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1
6.00 - 7.00am																									
7.00 - 7.30am																									
7.30 - 8.00am																									
8.00 - 9.00am																									
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10.00 -11.00pm																									





Junior Comp U15-U19	
Junior Comp U9 - U13	
Senior Comp	
Ladies daytime	
Aussie Hoops	
QBL Men and Women	
SBL Men and Women	
Acceleration Aust	
Training	
Jun Rep Training	
Individual Sessions	
Scrimmage	
External Hirer 2017	

105 57 70